

**FIG. 1**

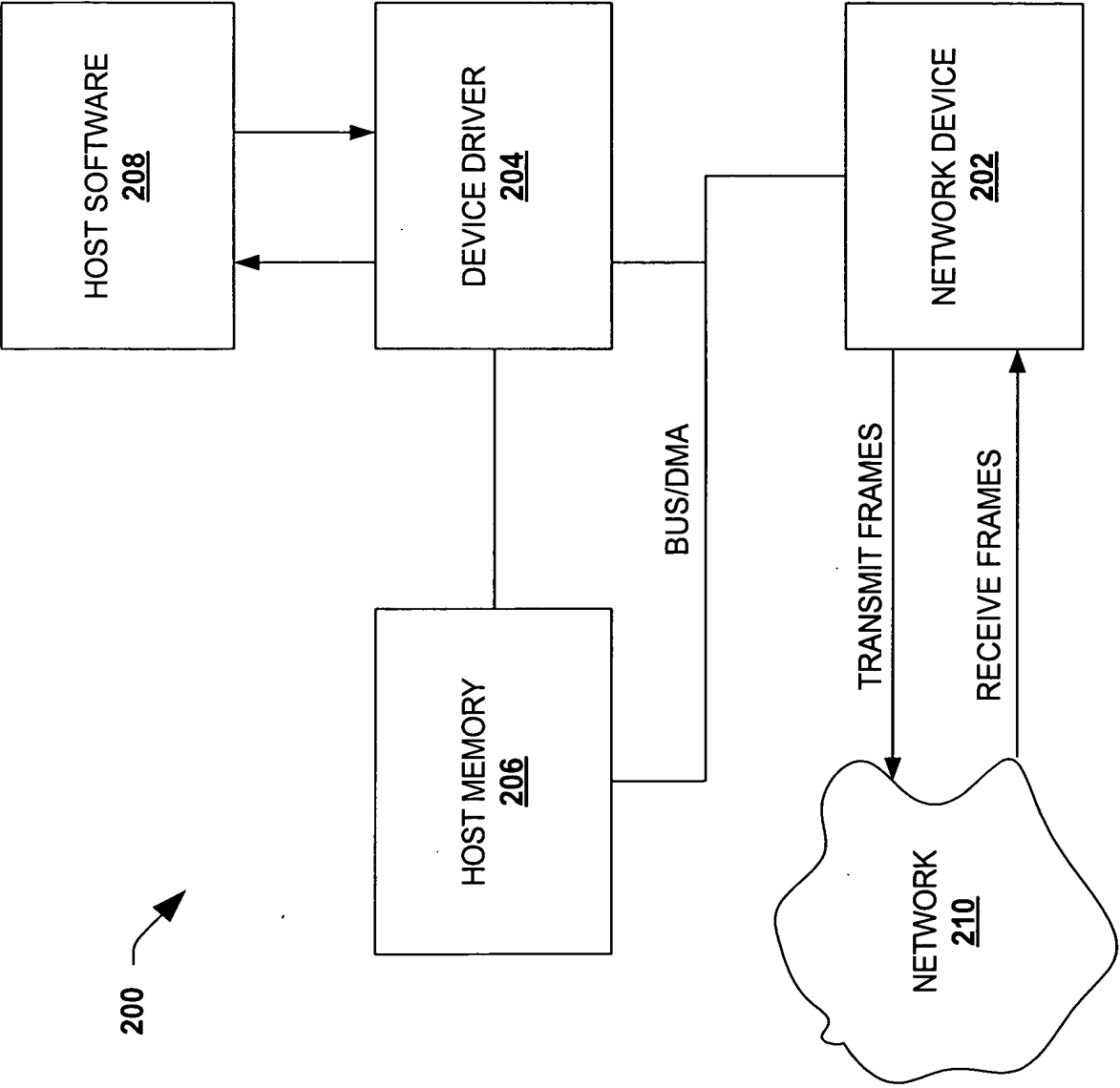


FIG. 2

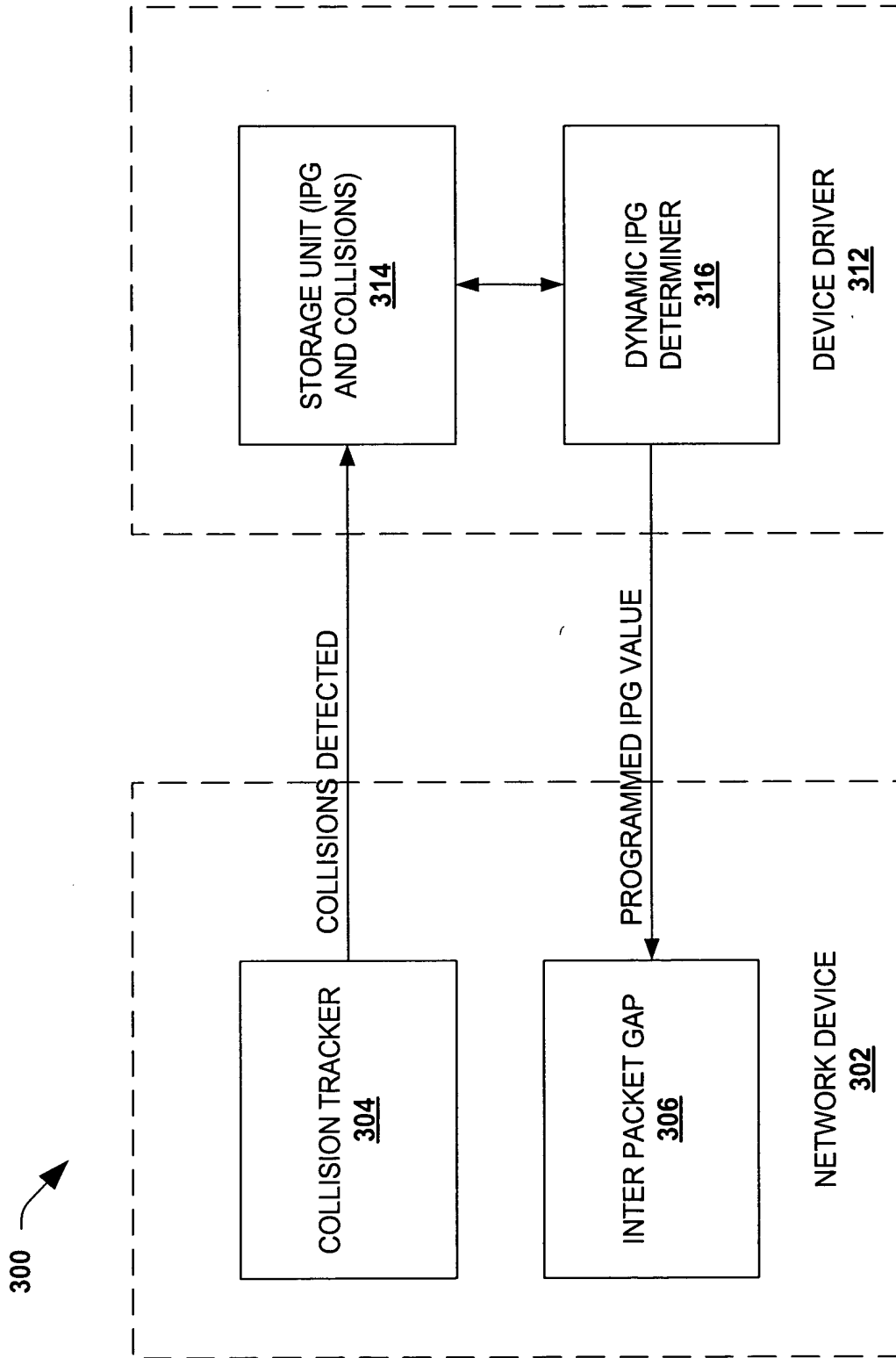


FIG. 3

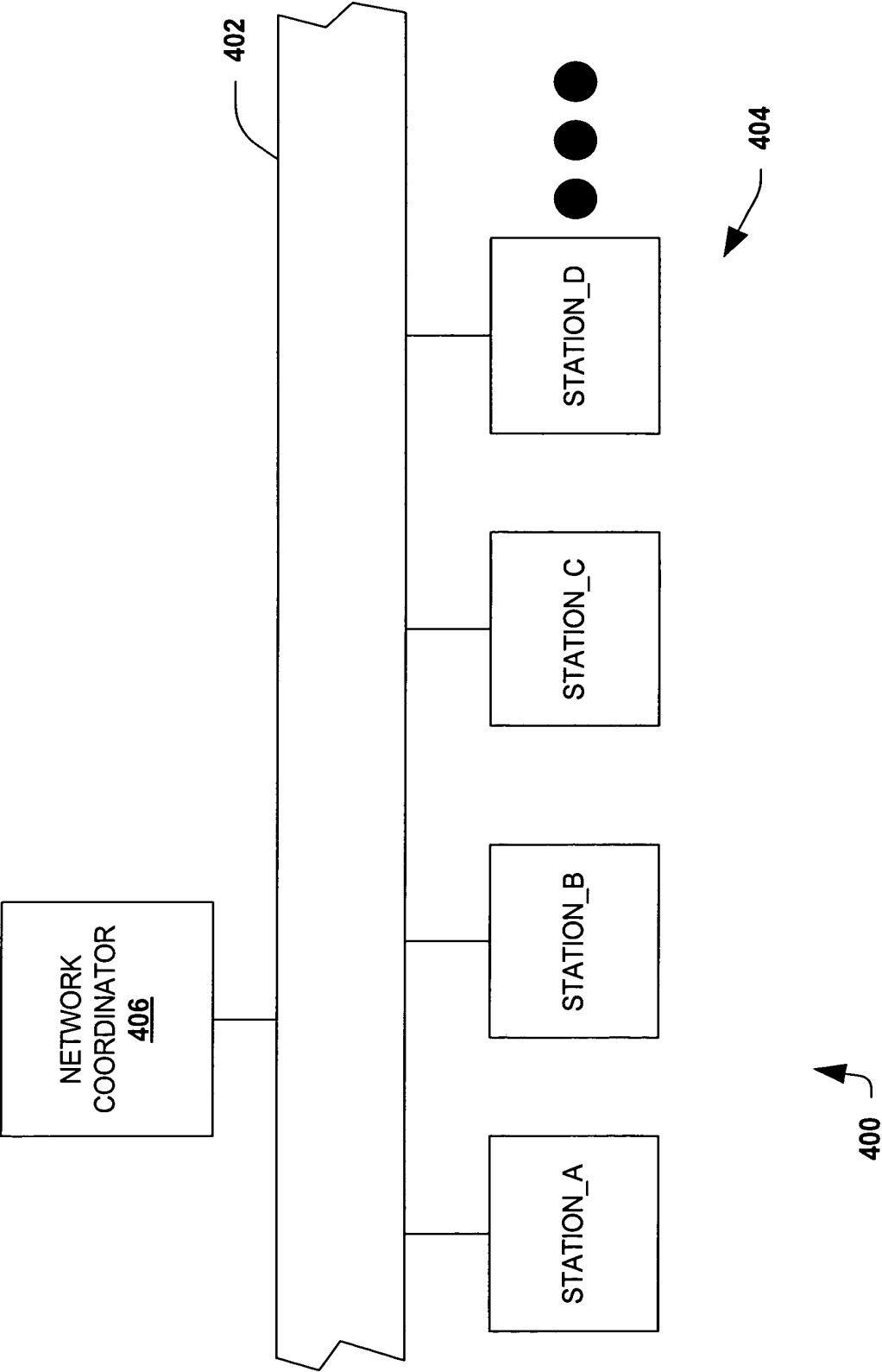
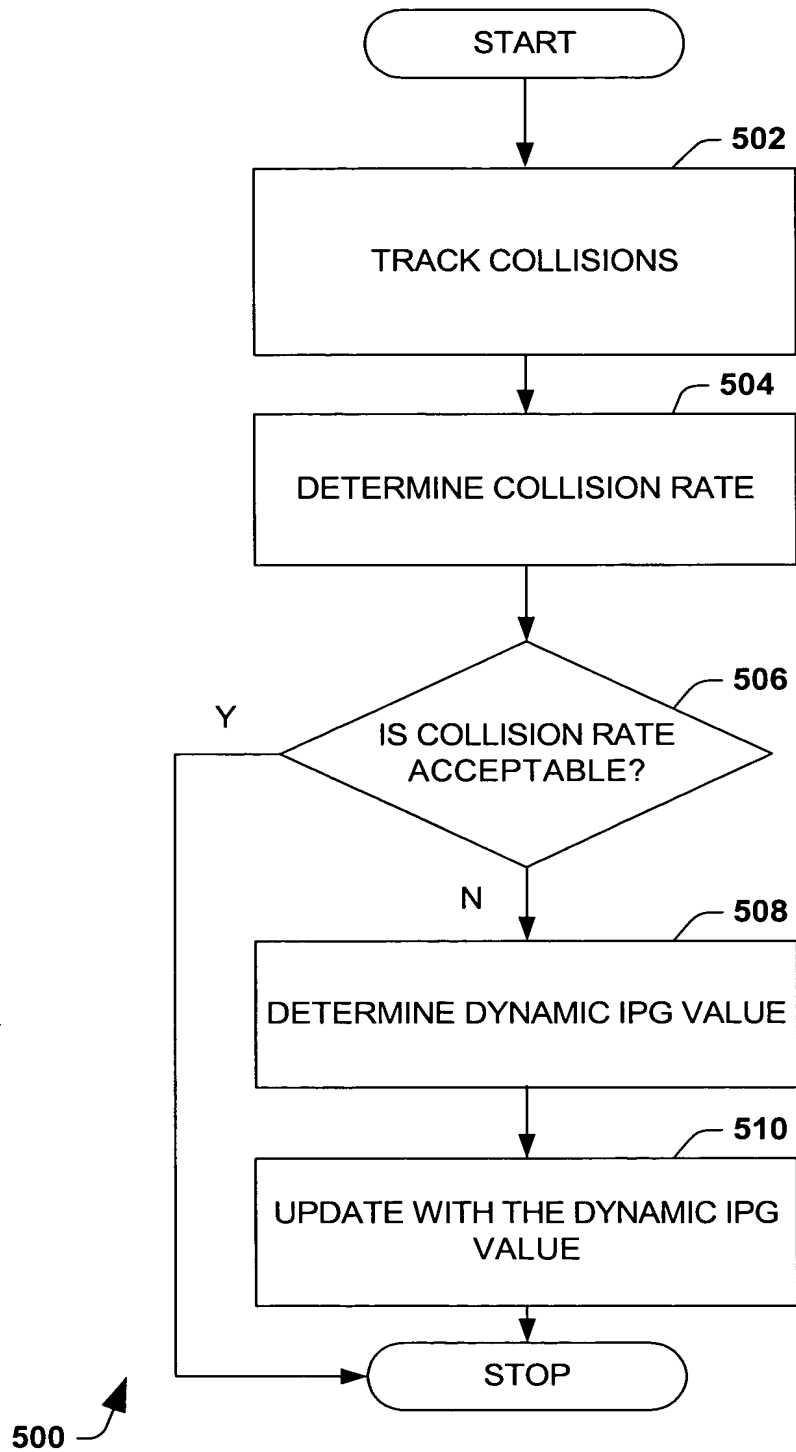
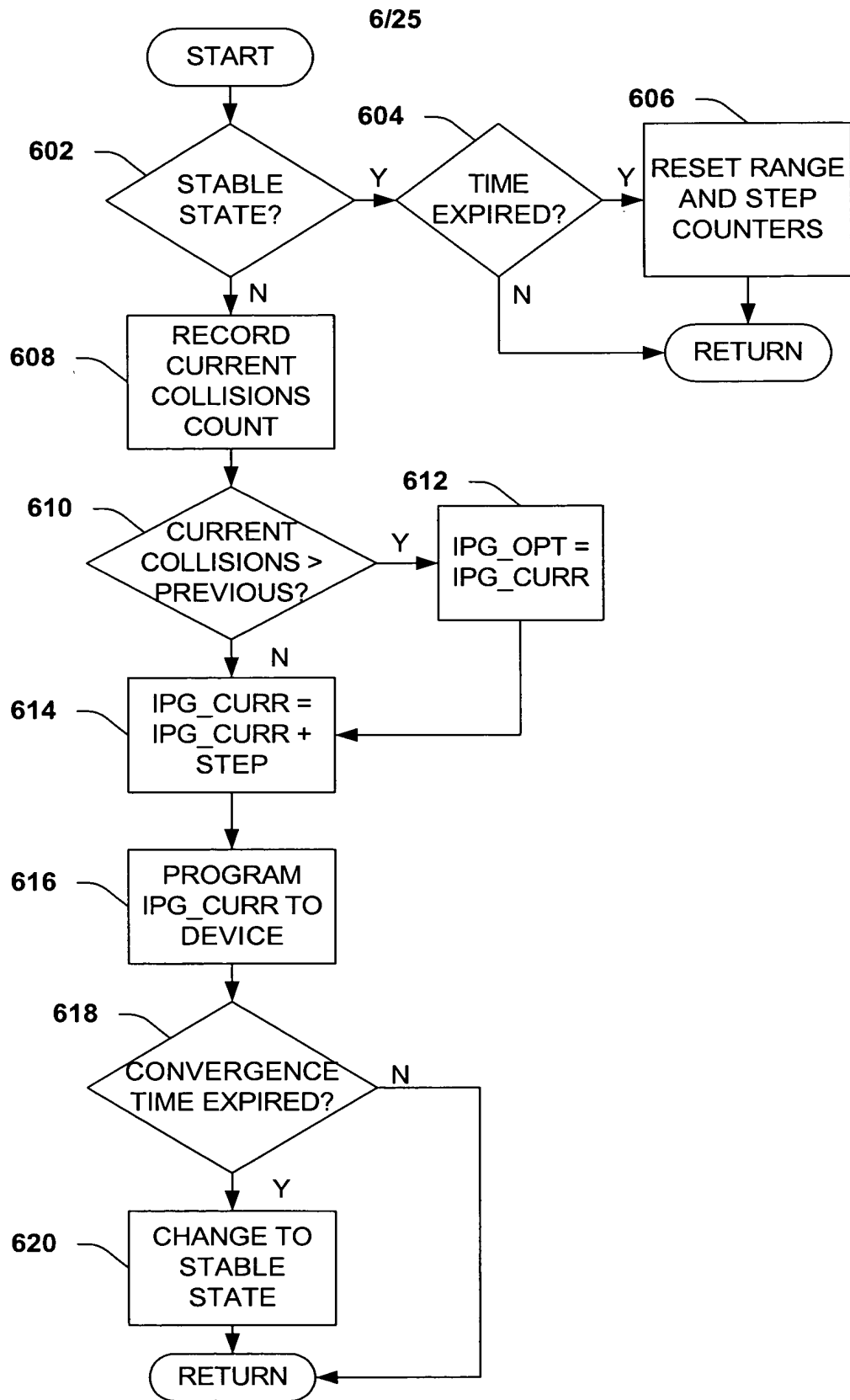


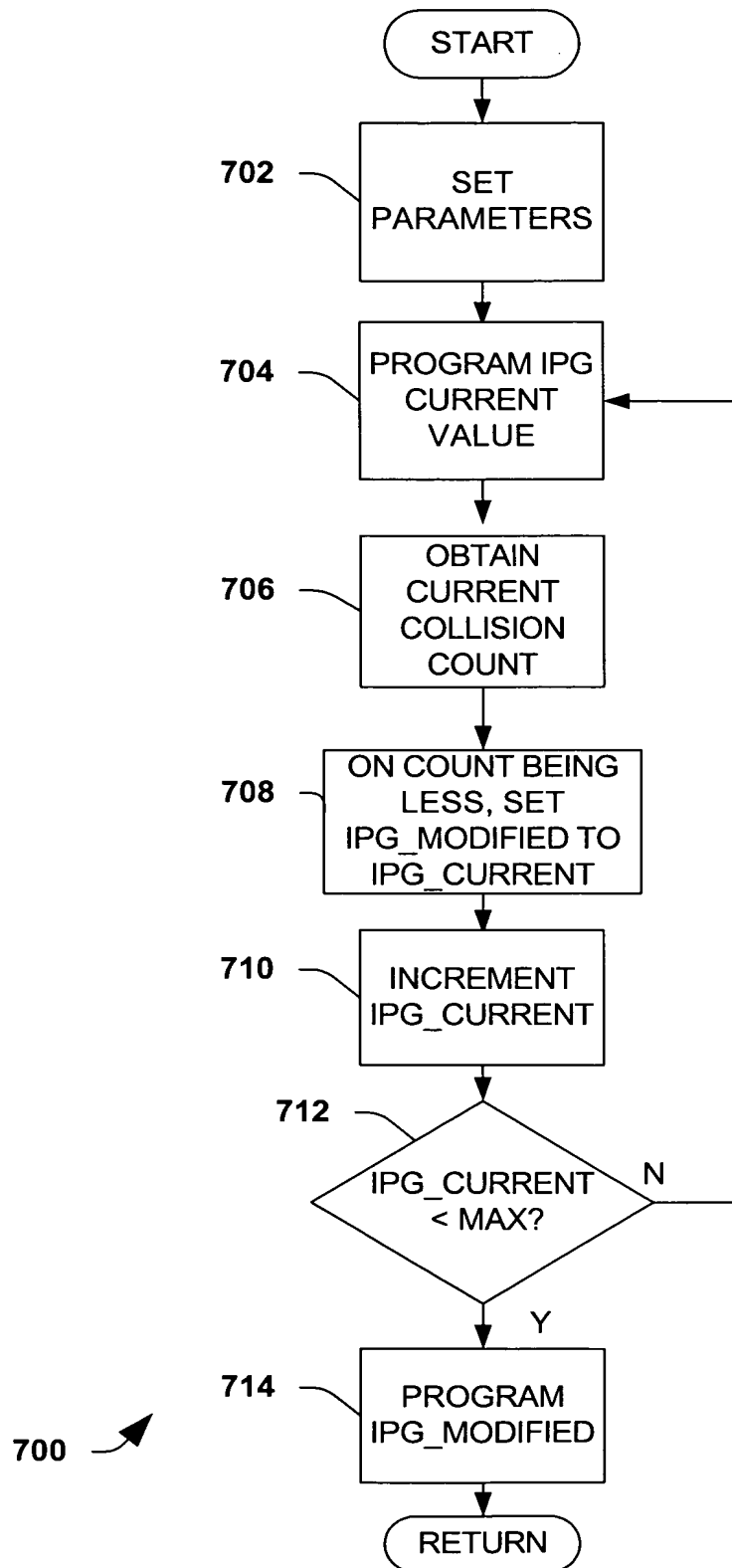
FIG. 4

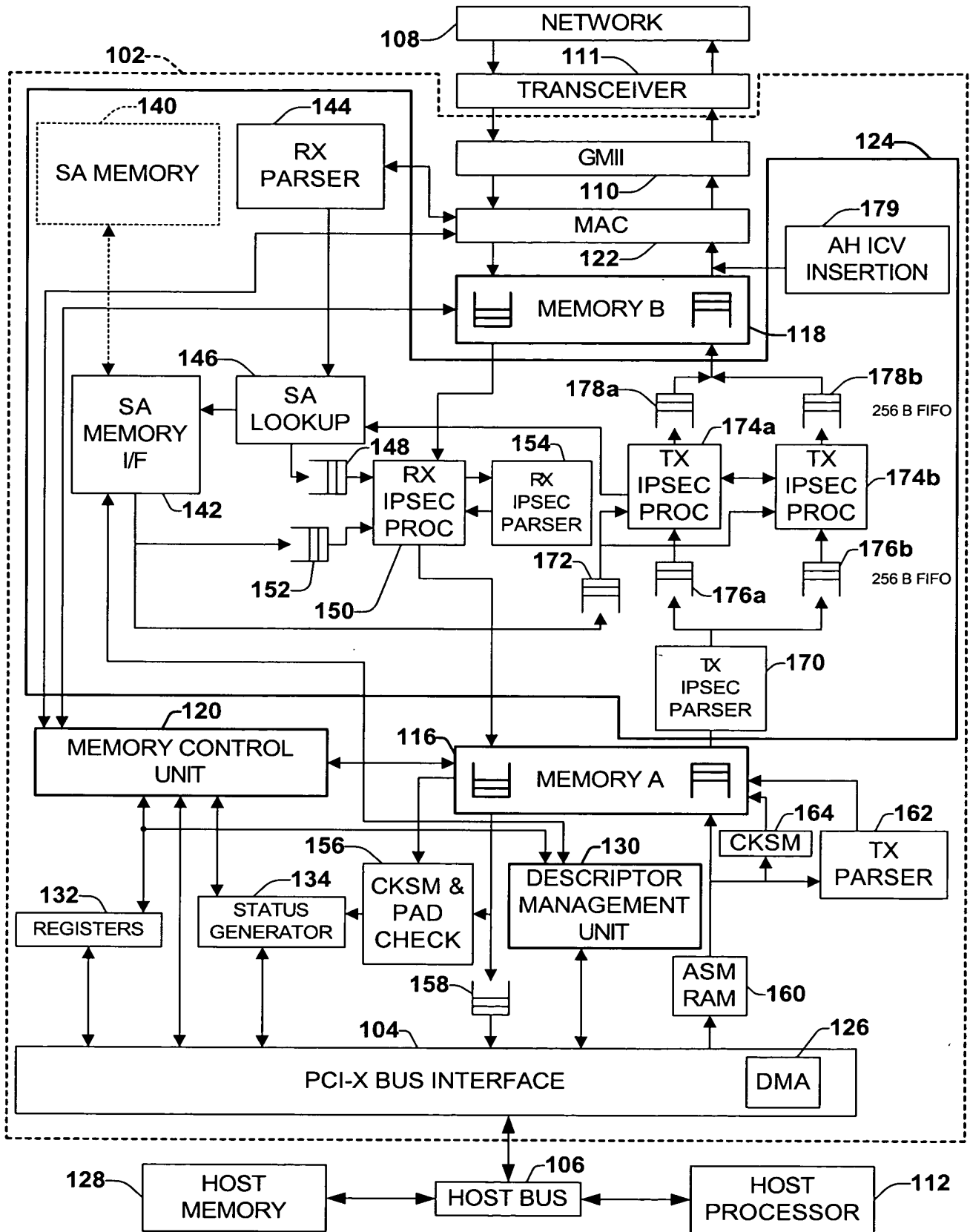
**FIG. 5**



600 ↗

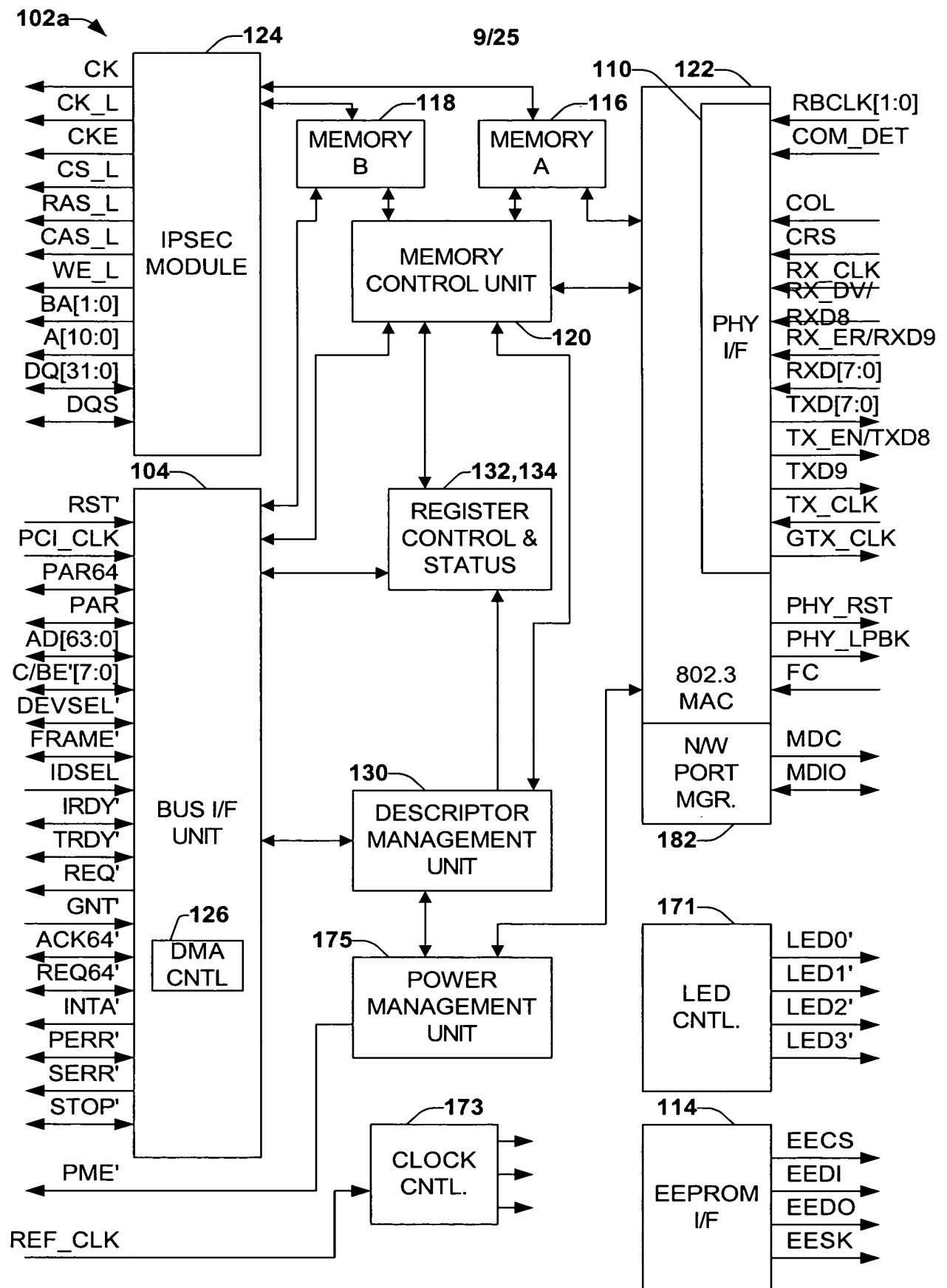
**FIG. 6**

**FIG. 7**

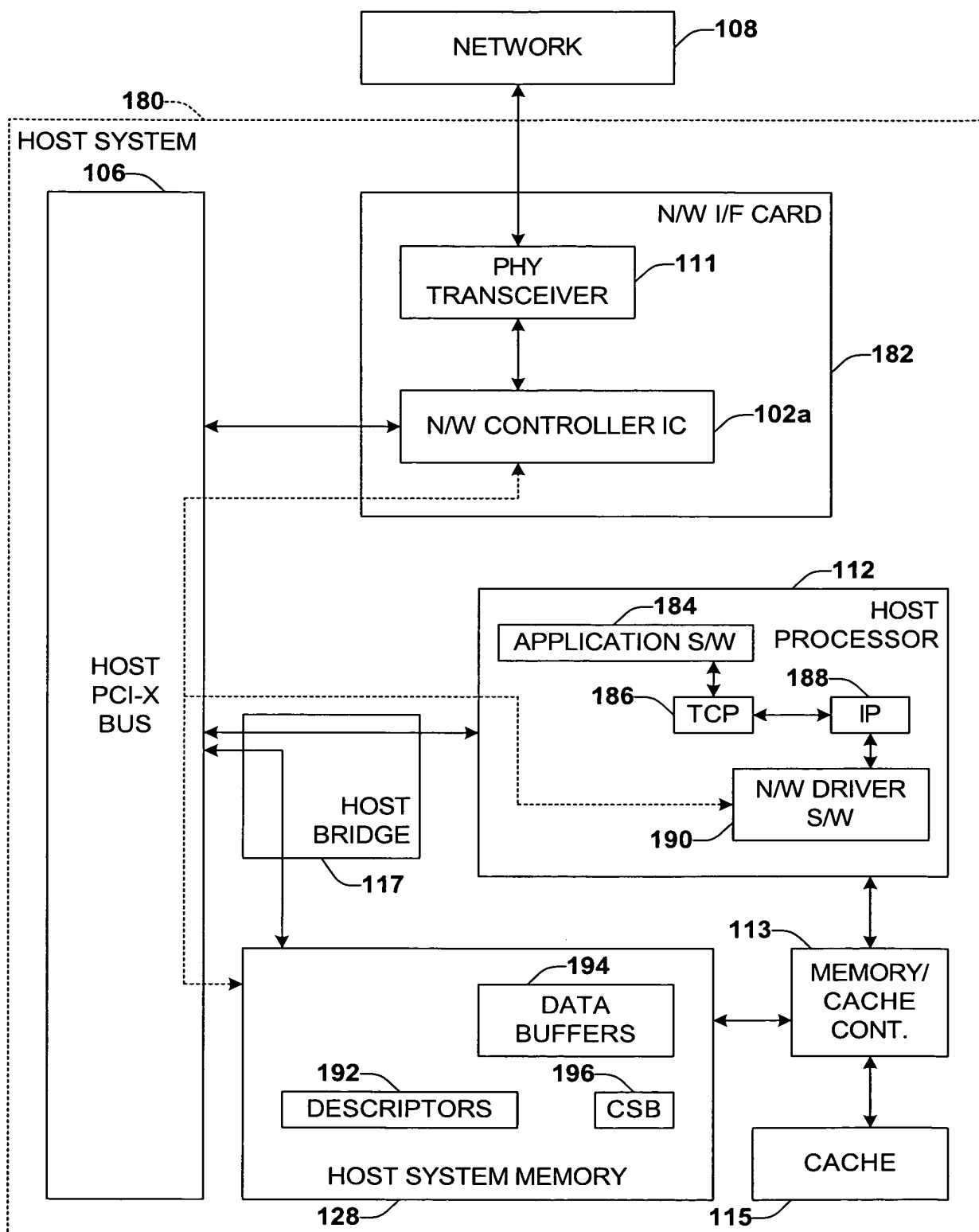


**FIG. 8**





**FIG. 9**

**FIG. 10**

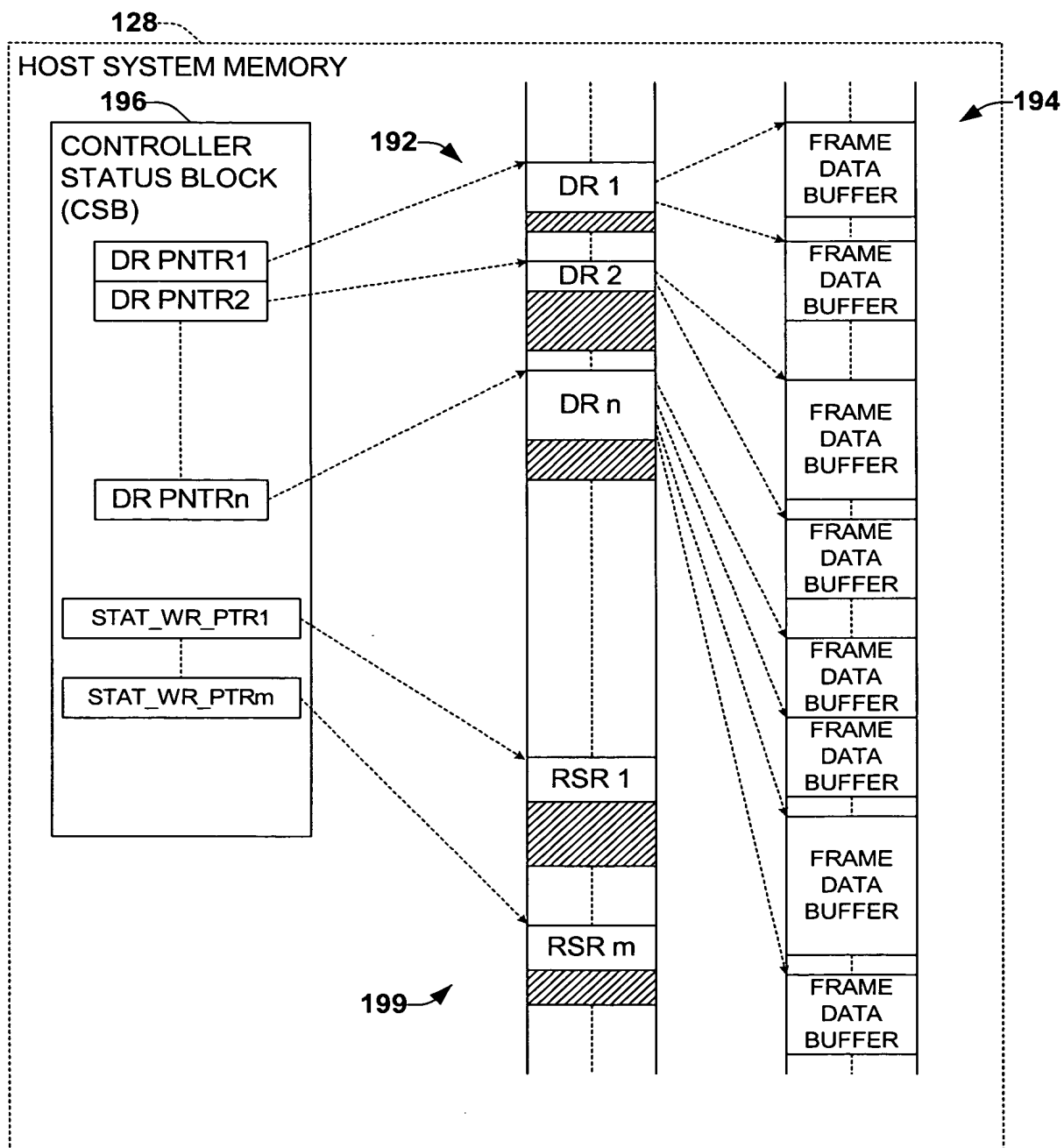


FIG. 11A

196

CSB

TX_RD_PTR0
TX_RD_PTR1
TX_RD_PTR2
TX_RD_PTR3
STAT_WR_PTR0
STAT_WR_PTR1
STAT_WR_PTR2
STAT_WR_PTR3
INT0_COPY

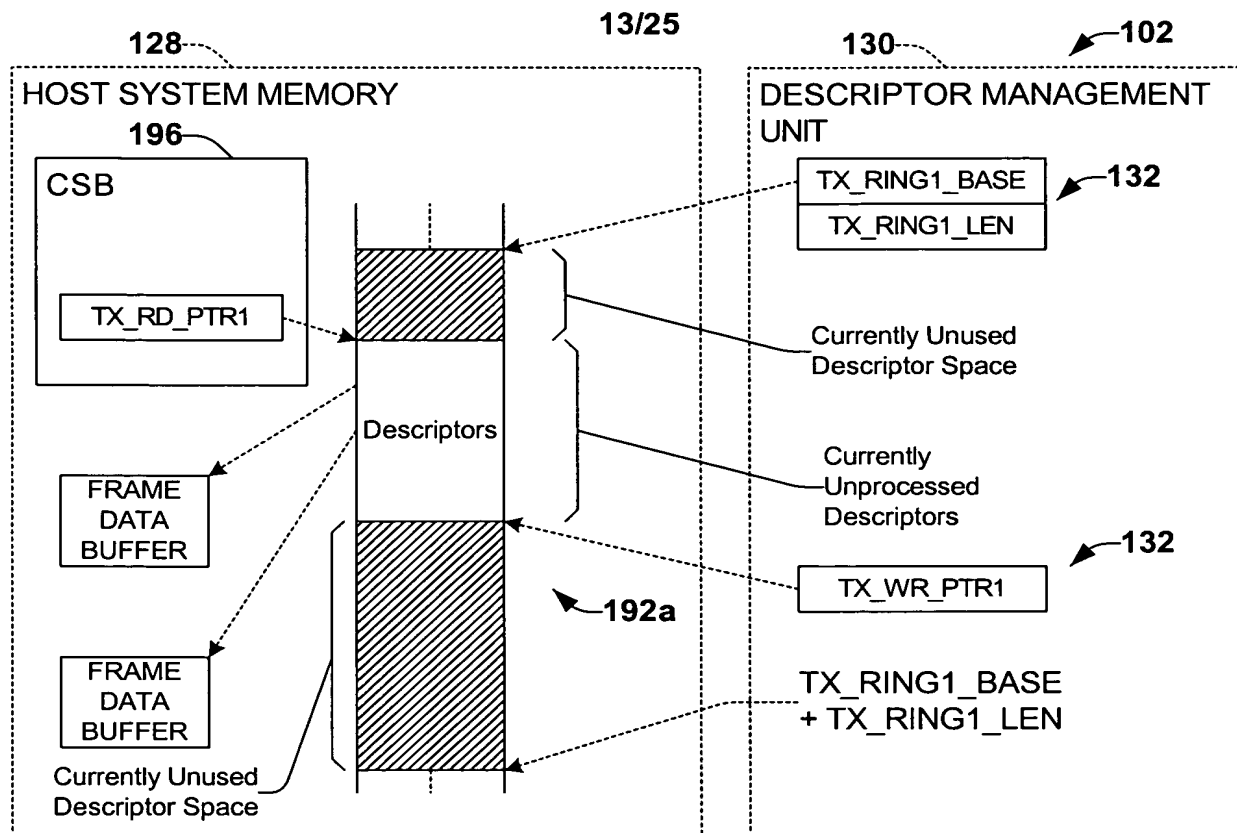
**FIG. 11B**

132

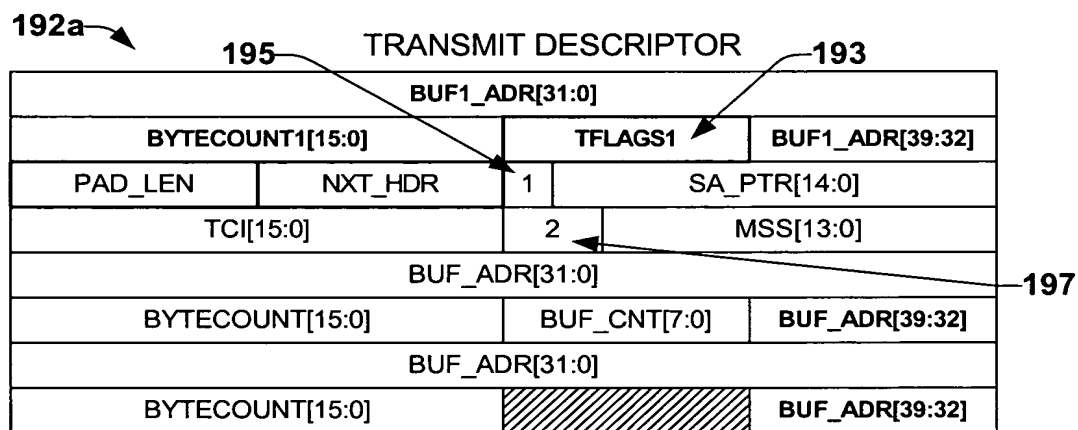
REGISTERS

RX_RING[3:0]_BASE
TX_RING[3:0]_BASE
RX_RING[3:0]_LEN
TX_RING[3:0]_LEN
TX_WR_PTR[3:0]
RX_WR_PTR[3:0]
STAT_RING[3:0]_BASE
STAT_RING[3:0]_LEN
RX_BUF_LEN
CSB_ADDR

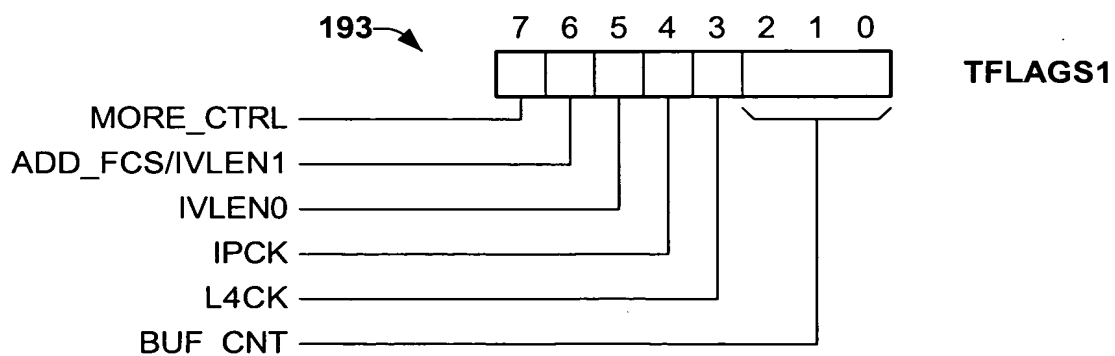
**FIG. 11C**



**FIG. 11D**



**FIG. 11E**



**FIG. 11F**

192b

## RECEIVE DESCRIPTOR

BUF_ADR[31:0]		
RES	BUF_MULT[7:0]	BUF_ADR[39:32]

FIG. 11G

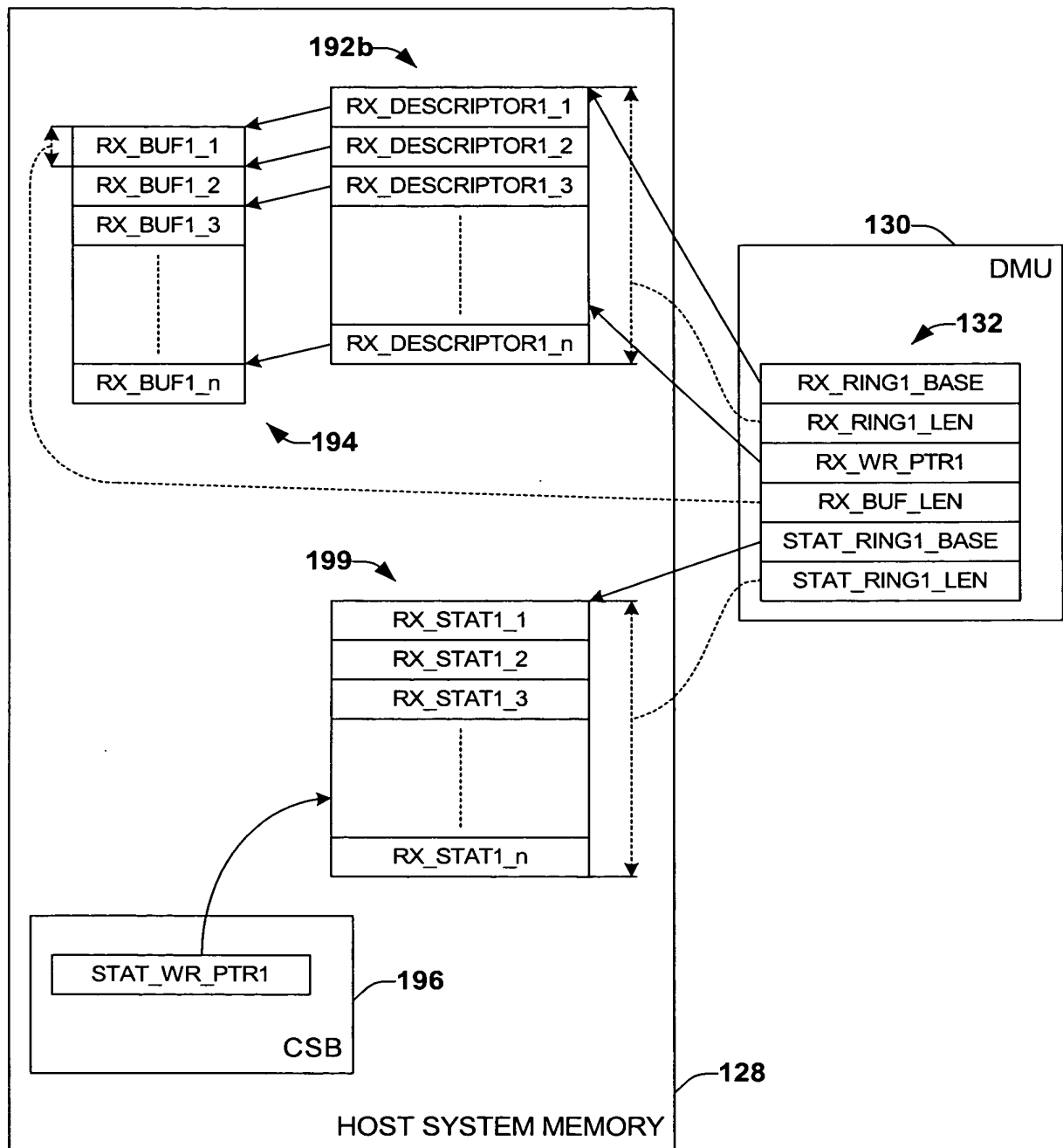
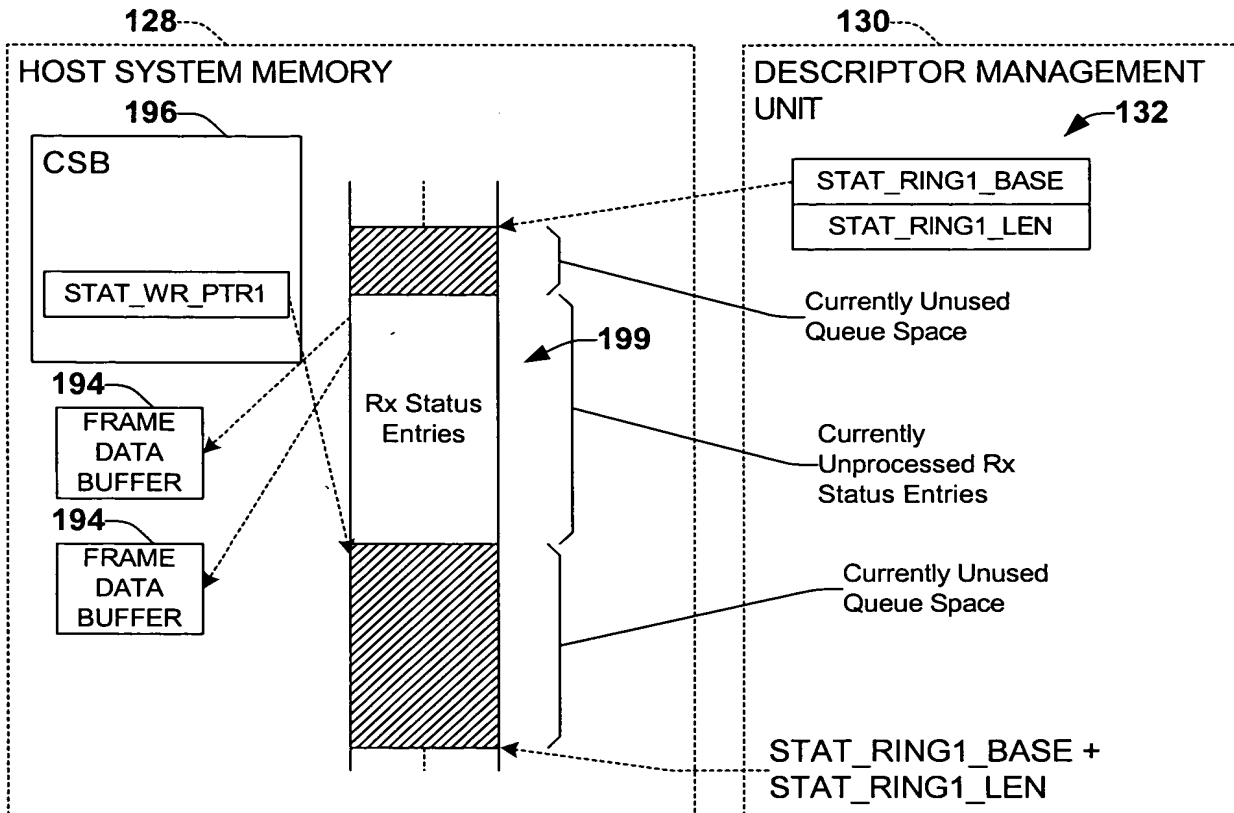
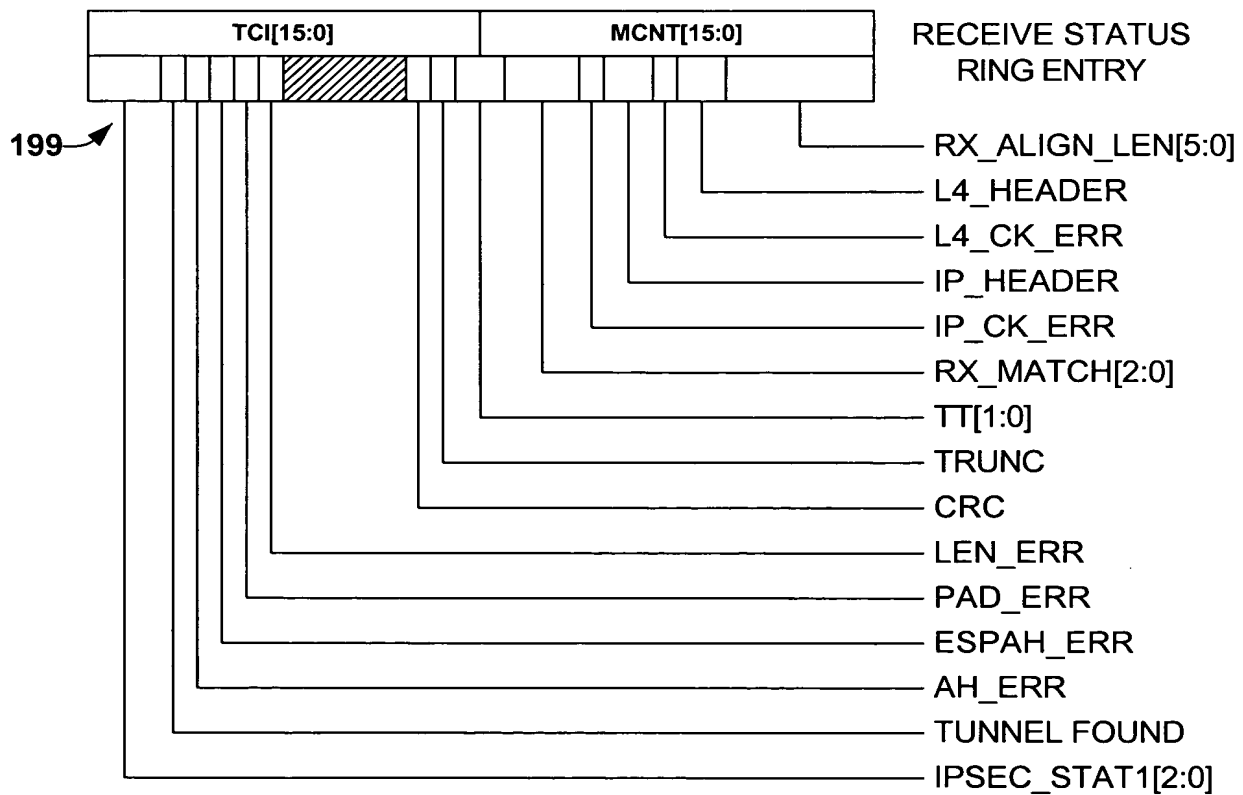


FIG. 11H

**FIG. 11I****FIG. 11J**

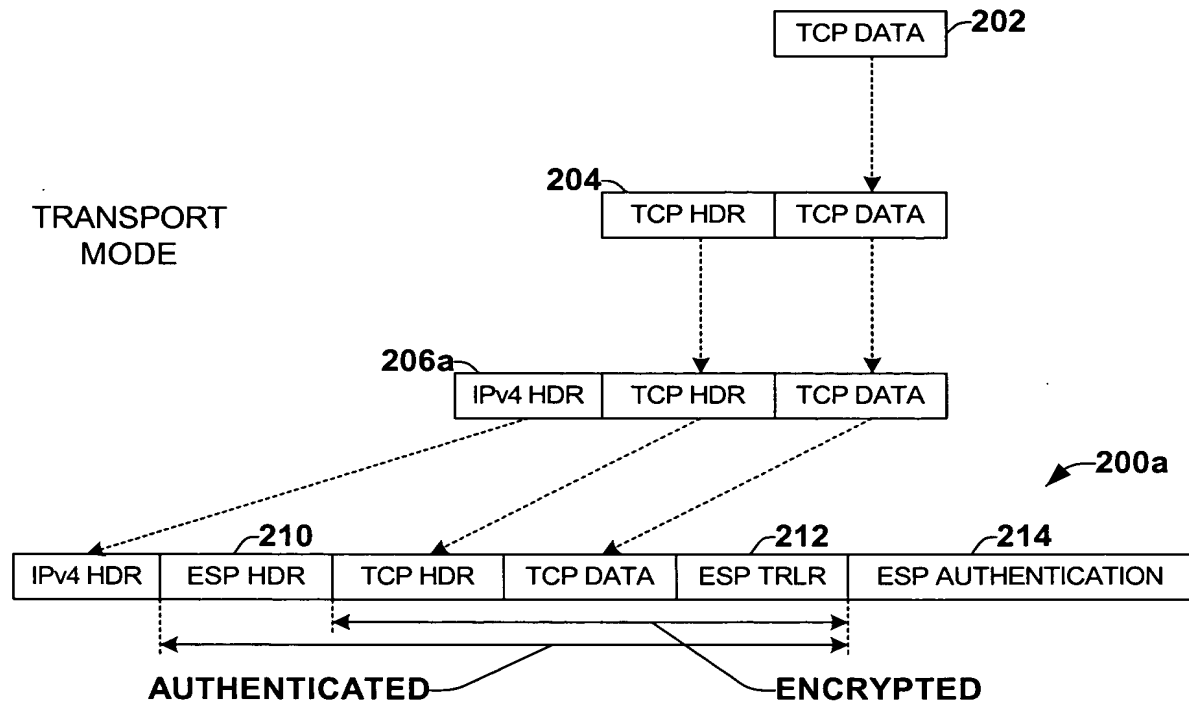


FIG. 12A

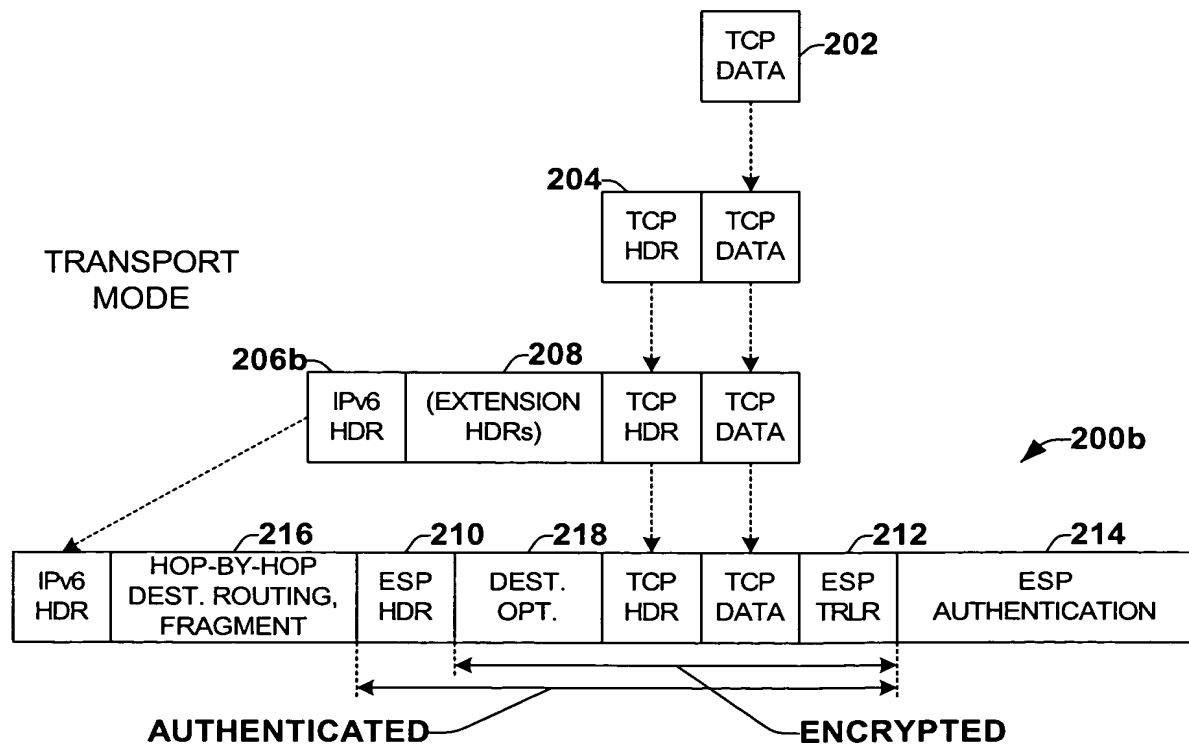


FIG. 12B



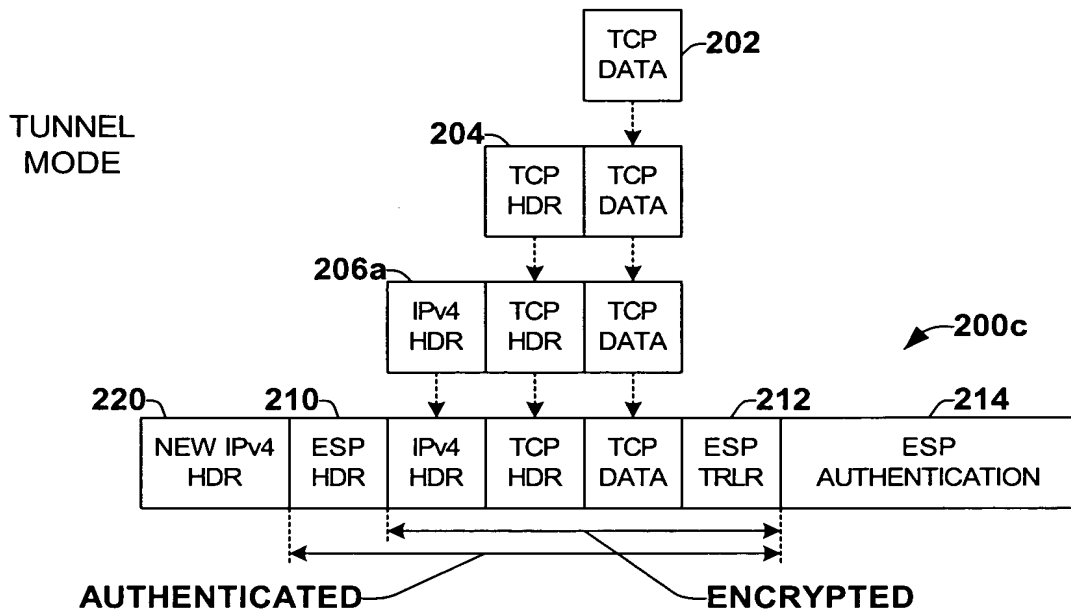


FIG. 12C

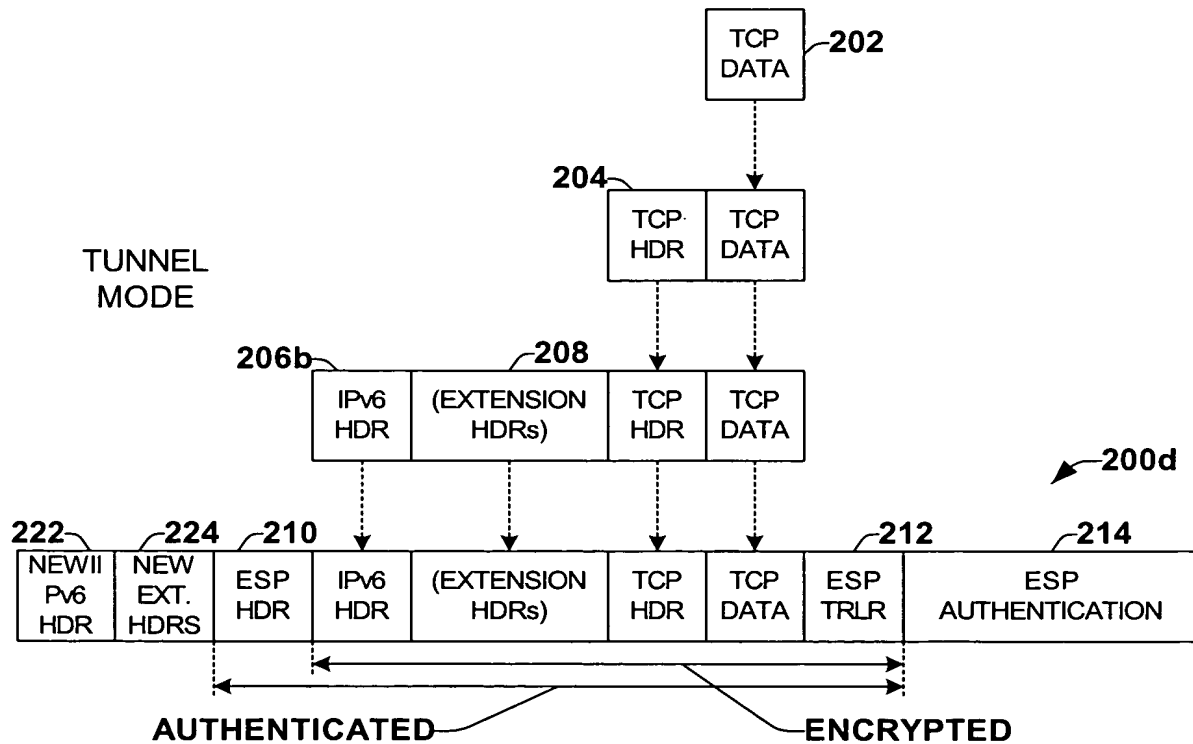
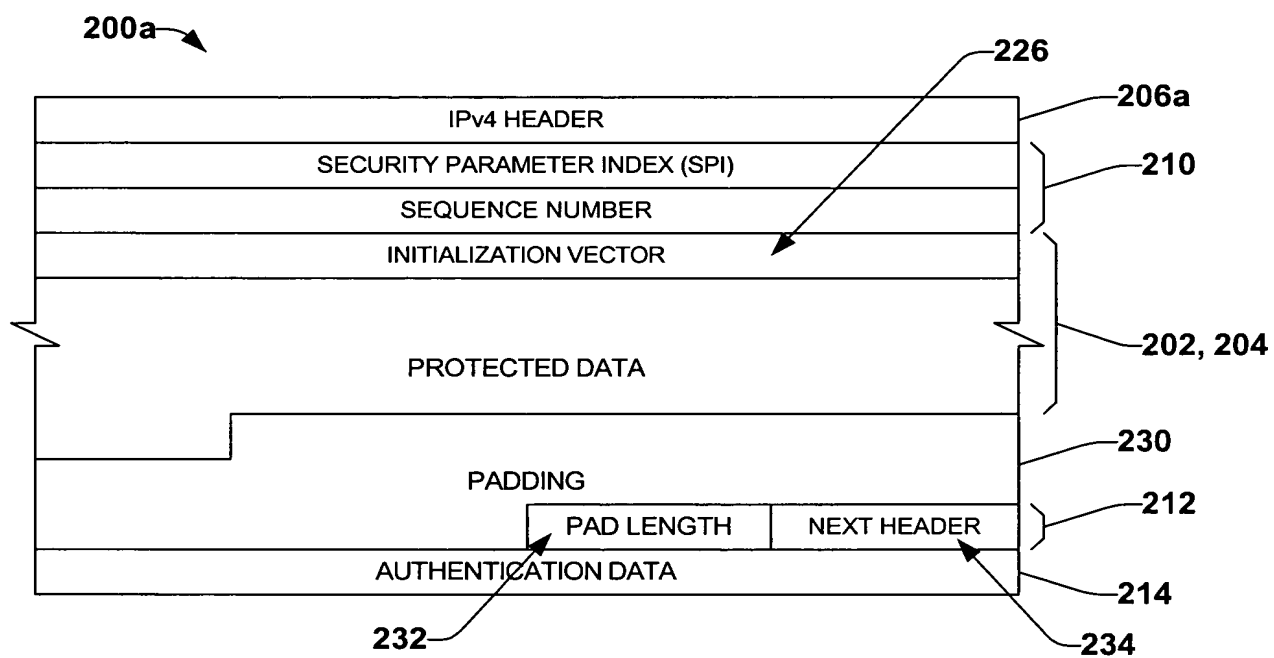


FIG. 12D

**FIG. 12E**

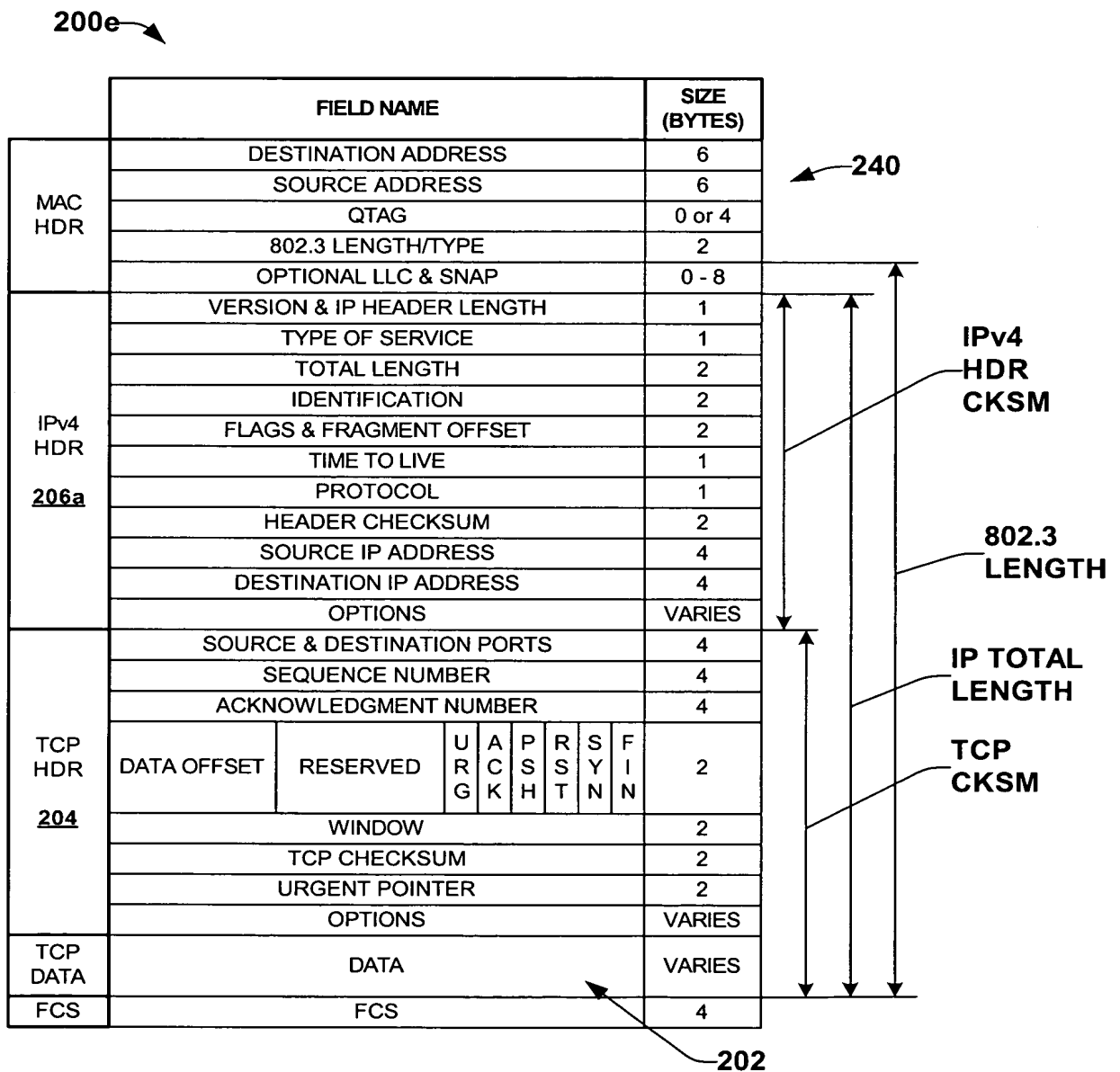


FIG. 13A

200f

	FIELD NAME								SIZE (BYTES)
MAC HDR	DESTINATION ADDRESS								6
	SOURCE ADDRESS								6
	QTAG								0 - 4
	LENGTH/TYPE								2
	OPTIONAL LLC & SNAP								0 - 8
IPv6 HDR  206b	VERSION, TRAFFIC CLASS, & FLOW LABEL								4
	PAYLOAD LENGTH								2
	NEXT HEADER								1
	HOP LIMIT								1
	SOURCE IP ADDRESS								16
	DESTINATION IP ADDRESS								16
	EXTENSION HEADERS								VARIES
TCP HDR  204	SOURCE & DESTINATION PORTS								4
	SEQUENCE NUMBER								4
	ACKNOWLEDGMENT NUMBER								4
	DATA OFFSET	RESERVED	URG	ACK	PSH	RST	SYN	FIN	2
	WINDOW								2
	TCP CHECKSUM								2
	URGENT POINTER								2
	OPTIONS								VARIES
TCP DATA	DATA								VARIES
FCS	FCS								4

240

802.3  
LENGTH

PAYLOAD  
LENGTH

TCP CKSM

202

FIG. 13B

250 →

FIELD NAME	Created by Host	Modified by ESP	Encrypted	Covered by ESP Authentication	Added by Controller
Preamble					x
Start of Frame Delimiter					x
MAC Header	x				
IP Header	x				
ESP Header	x			x	
Payload Data	x	x	x	x	
Padding	x	x	x	x	
Pad Length	x	x	x	x	
Next Header	x	x	x	x	
Authentication Data	x	x			
Frame Check Sequence					x

FIG. 14A

252 →

FIELD NAME	Created by Host	Modified by AH Module	Covered by AH Authentication	Added by Controller
Preamble				x
Start of Frame Delimiter				x
MAC Header	x			
IP Header	x		x	
AH Header	x	x	x	
Other Headers	x		x	
Payload Data	x		x	
Frame Check Sequence				X

FIG. 14B

254

PHCKSM FOR IPv4	
32-BIT IP SOURCE ADDRESS	
32-BIT IP DESTINATION ADDRESS	
ZERO	PROTOCOL
TCP TOTAL LENGTH	

FIG. 14C

256

PHCKSM FOR IPv6	
128-BIT IP SOURCE ADDRESS	
128-BIT IP DESTINATION ADDRESS	
16-BIT TCP TOTAL LENGTH	
ZERO	PROTOCOL

FIG. 14D

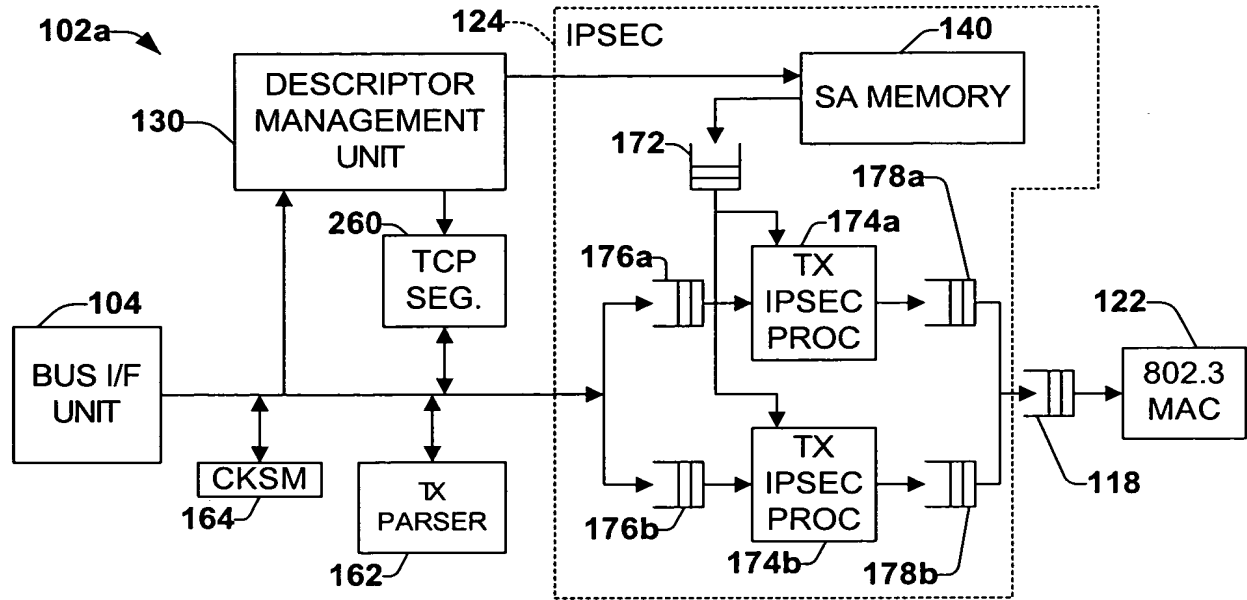


FIG. 15

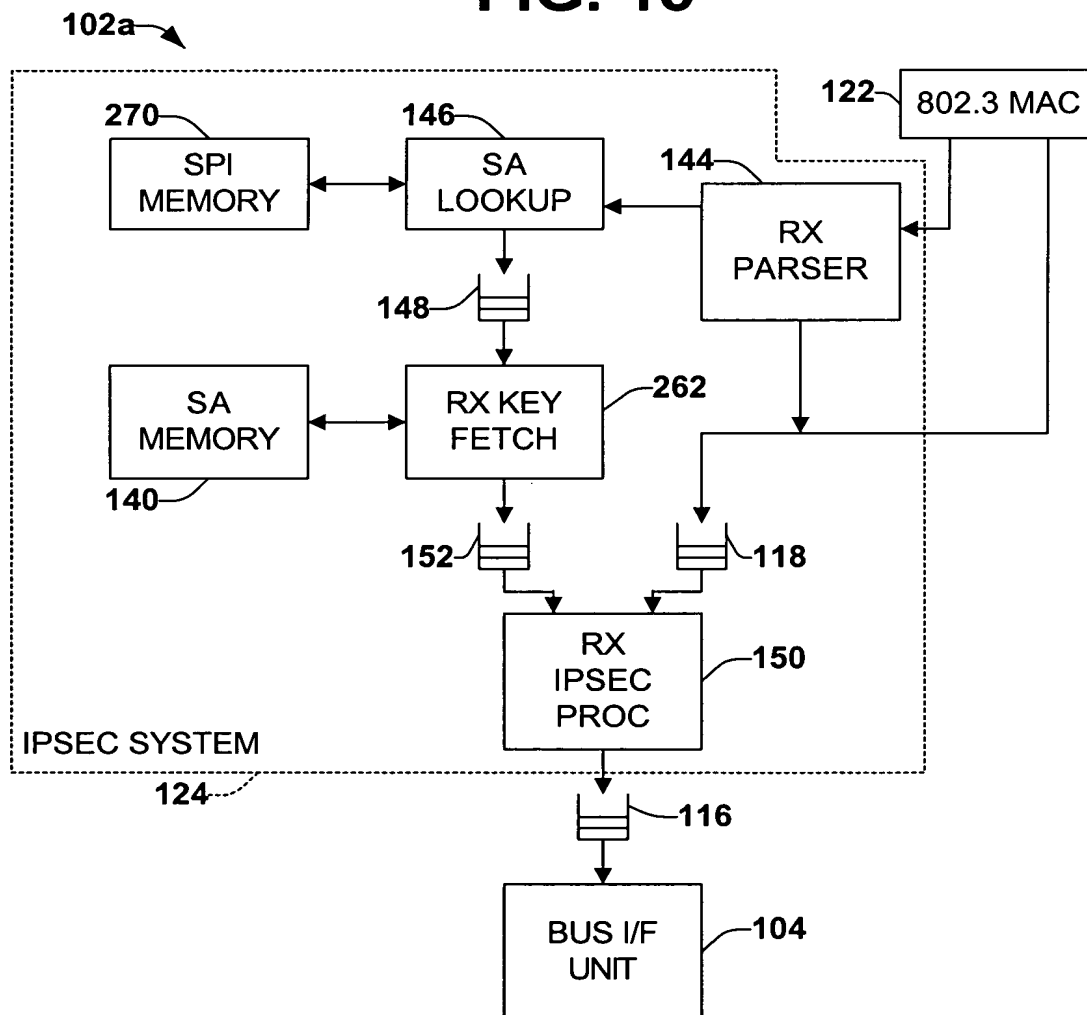
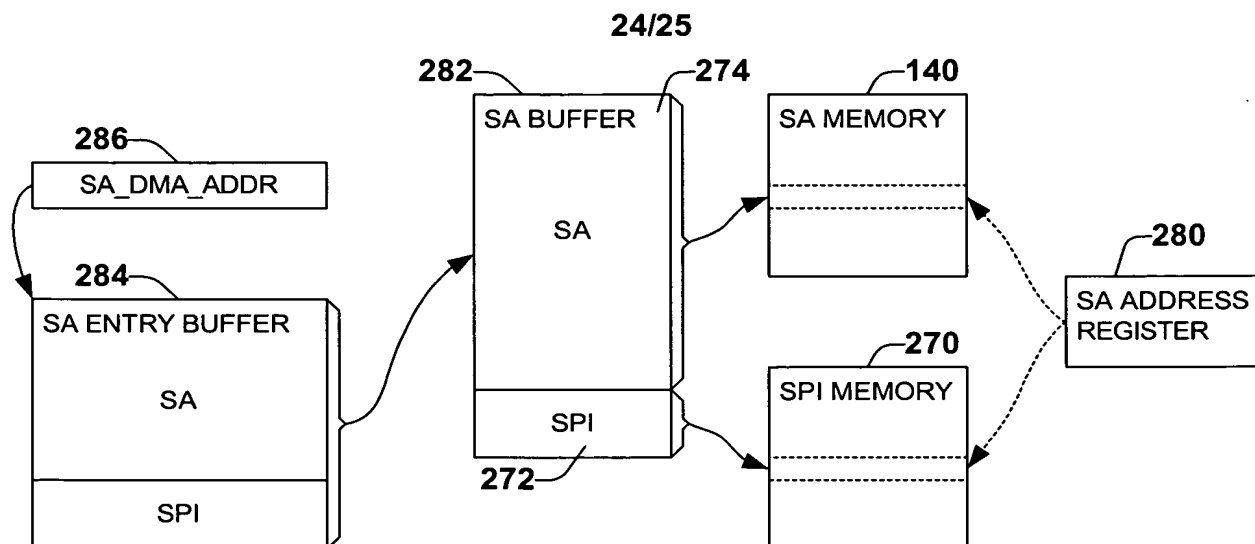
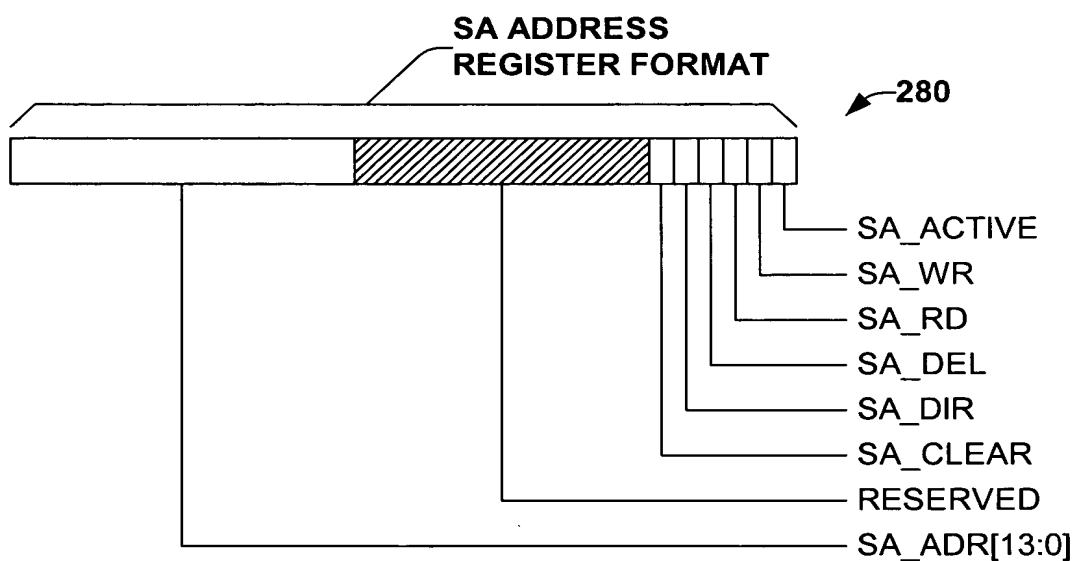


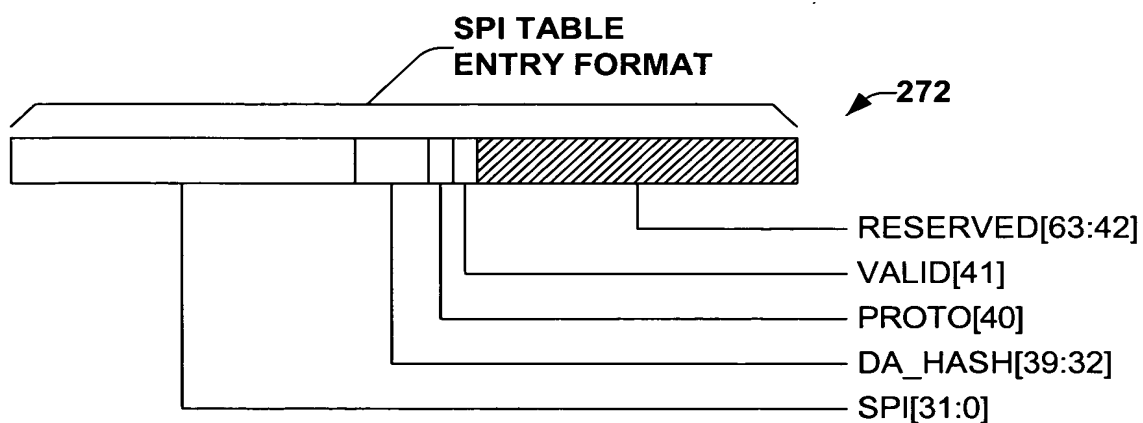
FIG. 16



**FIG. 17A**



**FIG. 17B**



**FIG. 17C**



140

## SA MEMORY ENTRY

274

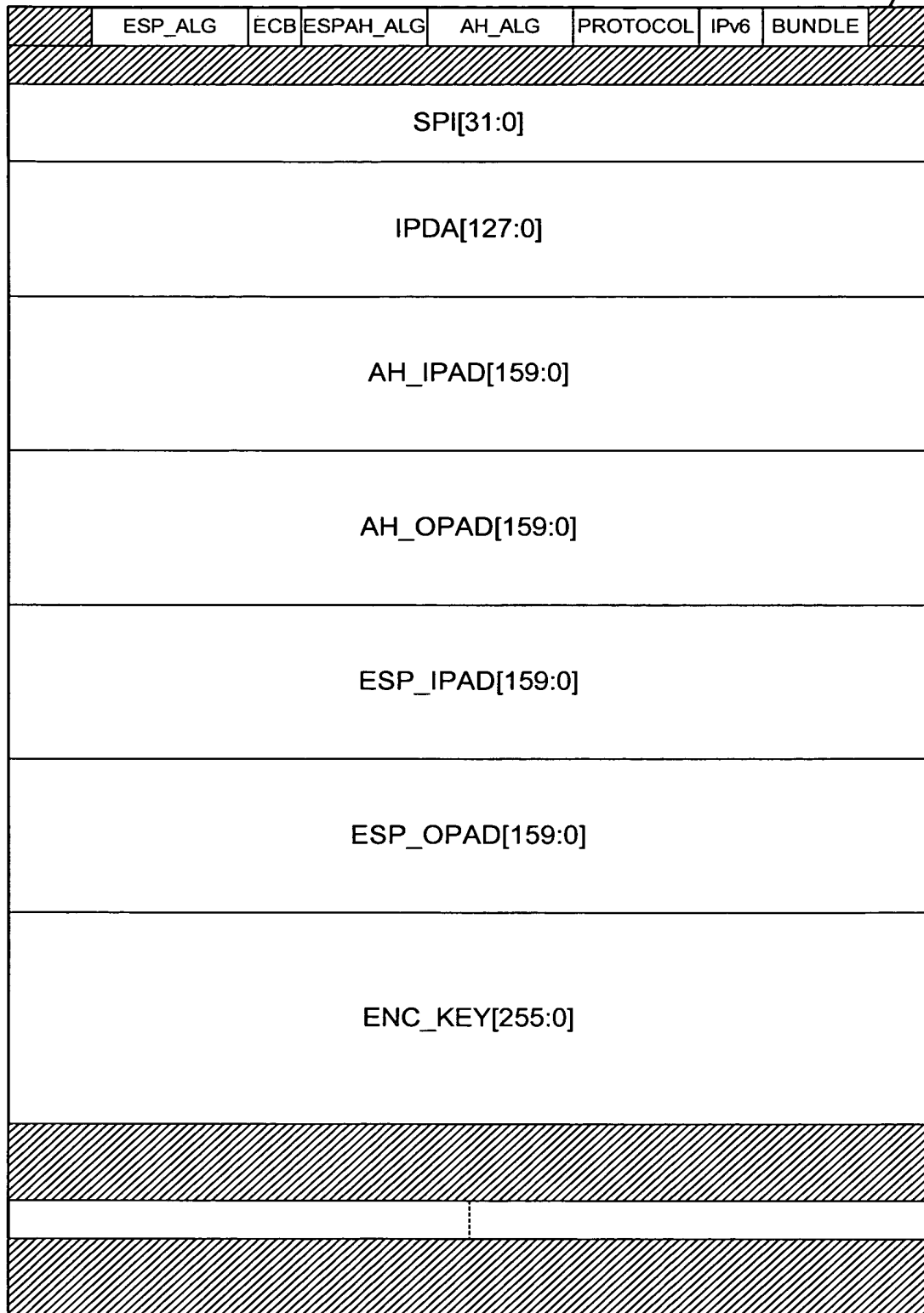


FIG. 17D